REGULATION OF THE WHOLESALE BROADBAND ACCESS MARKET

Wholesale Broadband Access (WBA) refers to the market in which an internet service provider with limited own infrastructure buys transmission services from an infrastructure-based telecommunication carrier in order to provide internet services to the end-users under his own name. The European Commission (European Commission 2007) defines the WBA market in its Relevant Markets Recommendation from 2007 as Market 5: "This market comprises non-physical or virtual network access including 'bitstream' access at a fixed location...".

The incumbent typically used to be the sole provider of WBA and was regulated on a national basis. The regulation comprises cost and access regulation besides a number of other remedies, such as non-discrimination, transparency or the requirement to account separately. In earlier phases of market development, the regulation of the WBA market was necessary and facilitated entry. Entrants were able to test local markets "risk-free" via the incumbent's network without the commitment of building their own infrastructure. In recent years however, competitors have begun to build their own networks in areas in which they had established a sufficiently large customer base. The incumbent's networks are thus gradually replicated, and the competitors either already offer WBA or could potentially enter the WBA market.

In many countries, this increasingly infrastructure-based competition gave rise to the reconsideration of the national regulatory approach. It has been suggested that nowadays areas with well-developed infrastructure-based competition might actually benefit from deregulation. As a result, starting with the UK in 2008, a number of European countries have introduced – or debated – a sub-national geographically differentiated regulation of the WBA market. These schemes allow for the deregulation of areas with sufficient competition. Regulation would then only apply to areas in which competition law alone is not sufficient.

As shown in Table 1, only the UK and Portuguese regulatory authorities have to date introduced a geographically differentiated regulation. In the UK, British Telecom's exchange areas were chosen as the relevant

geographical unit at which regulation or deregulation occurs. The UK regulatory authority Ofcom grouped all exchange areas into three categories according to their competitive situation, based on the number of certain large competitors that are able to offer WBA services ("principal operators"), the availability of broadband via cable, and the size of the local market. In Ofcom's revision of the regulation in 2010, market size was considered redundant and replaced by the requirement that British Telecom's market share must not exceed 50 percent for deregulation. While exchanges in categories one and two remain regulated, the incumbent British Telecom was released from regulation in category three. The Portuguese national regulatory authority ANACOM chose a similar approach. Two categories of exchange areas were defined in 2008. Based on the number of infrastructure-based competitors (Local Loop Unbundlers) and the presence of cable operators, competitive exchange areas in the second category were deregulated. However, in contrast to the UK, where the incumbent faces direct competition on the WBA market, the Portuguese incumbent Portugal Telecom was the sole provider of WBA services. ANACOM argued that competition from cable operators and Local Loop Unbundlers on the retail market posed indirect pressure on prices in the WBA market.

The European Commission is generally in favour of geographical differentiation, provided it is in accordance with EU law: "For the Commission, Ofcom's proposal represents a reasonable move towards better targeted regulation, concentrating on those geographic areas where structural competition problems persist" (European Commission 2008). However, in other countries the European Commission expressed "serious doubts" as to the implementation of geographically differentiated regulation (in Spain, Finland, Poland, Czech Republic) and the scheme has not been adopted. In some cases, national authorities have already declined the proposal (Germany, Austria). The German regulator argued in 2009 that future developments in the telecom wholesale markets were too unforeseeable. With the upgrade of the old copper-based network with fibre-based infrastructure, a considerable portion of exchanges was expected to become redundant in the future. In this case, infrastructure-based Local Loop Unbundlers would depend on downstream (WBA) products to provide broadband services. WBA products would then be necessary for competition in the retail market and should therefore remain regulated. In addition, the national regulator found that differences in the competitive situation between areas were not

Table 1

	National re	National regulatory authorities	$\overline{}$	sts for geographic	differentiation of	f the Wholesale B	NRA): requests for geographic differentiation of the Wholesale Broadband Access (WBA) market	(WBA) market	
Criteria for deregulation	United Kingdom	Portugal	Germany	Austria	Spain	Finland	Poland	Romania	Czech Republic
Unit of (de)regulation	Exchanges	Exchanges	Exchanges	Exchanges	Exchanges	Exchanges	Municipalities	1	Municipalities
Market size (premises)	> 10,000 (in 2008 only)	ı	> 4,000 households	> 2,500	≥ 10,000 households	-	,	1	1
Market share incumbent	< 50% (2010)	< 50%	< 50%	< 50%	< 50%	< 50%	≥ 40%	Market traditionally unregulated	≤ 40%
No. of relevant operators (incl. incumbent)	≥ 4 (principal operators only)	> 3 (1 LLU, 1 cable)	> 4	≥4	> 4 (2 LLU + 1 cable or 3 LLU)	≥3	> 3	-	≥ 3 (competing infrastructures)
Cable	≥ 65 % cov.	> 60 % cov.	No	Yes	\geq 60 % cov.	Yes	No	ı	Yes
EC (or NRA) notification	tification								
Status	Approved (Feb. 2008)	Approved (Jan. 2009)	Rejected by NRA (2009)	Rejected by Admin. Court (Dez. 2008)	Rejected by EC , serious doubts" (Nov. 2008)	Rejected by EC "serious doubts" (Jan. 2009)	Rejected by EC "serious doubts" (Apr. 2012)	Acknowledged by EU in 2010	Rejected by EC "serious doubts" (Aug. 2012)
Reasons for rejection			National scope of market Removal of exchanges Future development unknown	National scope of market	National scope of market WBA < 30 Mbit LLUs' usage of own WBA is	National scope of market "Structural" indicators	National scope of market "Structural" indicators no cost orientation for FTTC		Municipalities do not reflect local markets Competing infrastructures not sufficient for competition
Note: Apart from	Note: Apart from Germany and Austria, all countries' NRAs filed notifications for geographic segmentation with the EC which were rejected or approved by the Commission.	ia, all countries' NR	As filed notification	ns for geographic s	egmentation with th	e EC which were re	jected or approved l	by the Commission.	

Source: Fabritz and Falck (2013).

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sufficient to justify a differentiated regulation. In Austria the Administrative Court objected to the national regulator's decision to deregulate in 2008, since it had also defined the national scope of the WBA market.

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